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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,442

11/28/2006

James P. Pfau

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BERENATO, WHITE & STAVISH, LLC
6550 ROCK SPRING DRIVE
SUITE 240
BETHESDA, MD 20817

EXAMINER

NELSON, MICHAEL B

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

11/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,442	Applicant(s) PFAU ET AL.	
	Examiner MICHAEL B. NELSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 24-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/03/07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of group I, claims 1-23, filed on 09/03/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7-13, 16, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ford et al. (U.S. 2002/0091218).

Regarding claim 1, Ford et al. discloses a composite door skin (See Abstract) comprising 66% polypropylene resin, 15% glass fiber, and 15 % mineral filler (i.e. talc) ([0033]). The method of forming the door (i.e. combining all the ingredients into a hopper, melting them and forming the door in a mold, [0038]) would result in the glass fibers being randomly oriented within the composite.

Regarding claim 2-4, 7-13, 16, 22 and 23, Ford et al. discloses all of the limitations as set forth above. Additionally, Ford et al. discloses that the door skin is a molded door facing ([0037]-[0047] and Fig. 1) with a rectangular shape and inner and outer sides with a plurality of panels on the outer side. The resins disclosed for use in the composite include polypropylene and high impact polystyrene ([0034]). An example is given in which the composite comprises

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66% polypropylene resin, 15% glass fiber, and 15 % mineral filler (i.e. talc) ([0033]). The glass fibers are disclosed as having a length of 4mm ([0033]). Wood fibers additives are also disclosed in the invention at proportions of 20% fiber to 80% resin ([0034] and [0035]). The door skins are shown as being put on both sides of a door frame (Fig. 7).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. Claims 5 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al. (U.S. 2002/0091218) in view of Bradley (U.S. 6,209,172).

Regarding claims 5 and 6, Ford et al. discloses all of the limitations as set forth above. Ford et al. does not specifically disclose that the inner side of the door skin be molded so as to include reinforcing ribs. Bradley discloses a door panel in which reinforcing ribs are provided along the inner side to provide reinforcement to the wall facing part (C3, L1-20 and Fig. 3).

The inventions of both Ford et al. and Bradley are drawn to the field of door panels and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the structure of the door panel of Ford et al. by including the ribs of Bradley for the purposes of imparting improved reinforcement.

Regarding the arrangement of the ribs, modified Ford et al. does not disclose the specific arrangement as instantly claimed, however, one having ordinary skill in the art would have adjusted, through routine experimentation, the positioning of the ribs in the door panel in order to optimize the reinforcement at localized portions of the panel while at the same time minimizing costs of manufacture.

8. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al. (U.S. 2002/0091218) in view of Watterson, et al. (U.S. 5,919,554).

Regarding claims 5 and 6, Ford et al. discloses all of the limitations as set forth above. Ford does not specifically disclose that Mica be used as a mineral filler, although talc and calcium carbonate are disclosed ([0035]). Watterson et al. discloses a reinforced resin based composite material for construction panels (C1, L10-30) in which mineral fillers, inter alia talc,

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mica and calcium carbonate, are used as mineral fillers in order to improve shrinkage and lower the cost to manufacture (C4, L30-45).

The inventions of both Ford et al. and Watterson et al. are drawn to the field of reinforced composite materials and therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the composition of Ford et al. by using mica as a miner filler as taught by Watterson et al. for the purposes of imparting improved shrinkage and reduced cost to manufacture.

Regarding the amount of filler used in the composition, while modified Ford et al. does not explicitly disclose an amount of filler which reads on the instantly claimed range of claim 15, one having ordinary skill in the art would have adjusted, through routine experimentation, the amount of filler in the composition, in order to optimize the shrinkage and the cost to manufacture while at the same time maintaining the structural integrity of the final molded product.

9. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al. (U.S. 2002/0091218) in view of Sasaki et al. (U.S. 6,313,184).

Regarding claim 17, Ford et al. discloses all of the limitations as set forth above. Ford et al. does not explicitly disclose the limitations on the polypropylene resin of instant claim 17. Sasaki et al. discloses a polypropylene resin composition with a melt flow rate of 0.5-12 g/10 minutes (See Abstract) which is especially useful for molded articles requiring high impact resistance (C1, L15-35) including door panels (C10, L40-65).

The inventions of both Ford et al. and Sasaki et al. are drawn to the field of resin blends for use with molded door panels and therefore it would have been obvious to one having

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ordinary skill in the art at the time of the invention to have modified the polypropylene resin of Ford et al. by using the polypropylene resin of Sasaki et al. for the purposes of imparting high impact resistance.

Regarding the limitations of instant claims 18-21, while modified Ford et al. does not explicitly disclose the recited mechanical and thermal properties, one having ordinary skill in the art would expect the molded door panel of modified Ford et al. to exhibit these properties considering the substantially similar composition as compared to the instant composition (i.e. resin type, fiber type, fiber length, filler type and relative amounts thereof).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL B. NELSON whose telephone number is (571) 270-3877. The examiner can normally be reached on Monday through Thursday 6AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MN/

10/01/08

/Carol Chaney/

Supervisory Patent Examiner, Art Unit 1794